

MANAGEMENT INDICATOR SPECIES

SAGE NESTERS

Brewer's Sparrow (*Spizella breweri*)

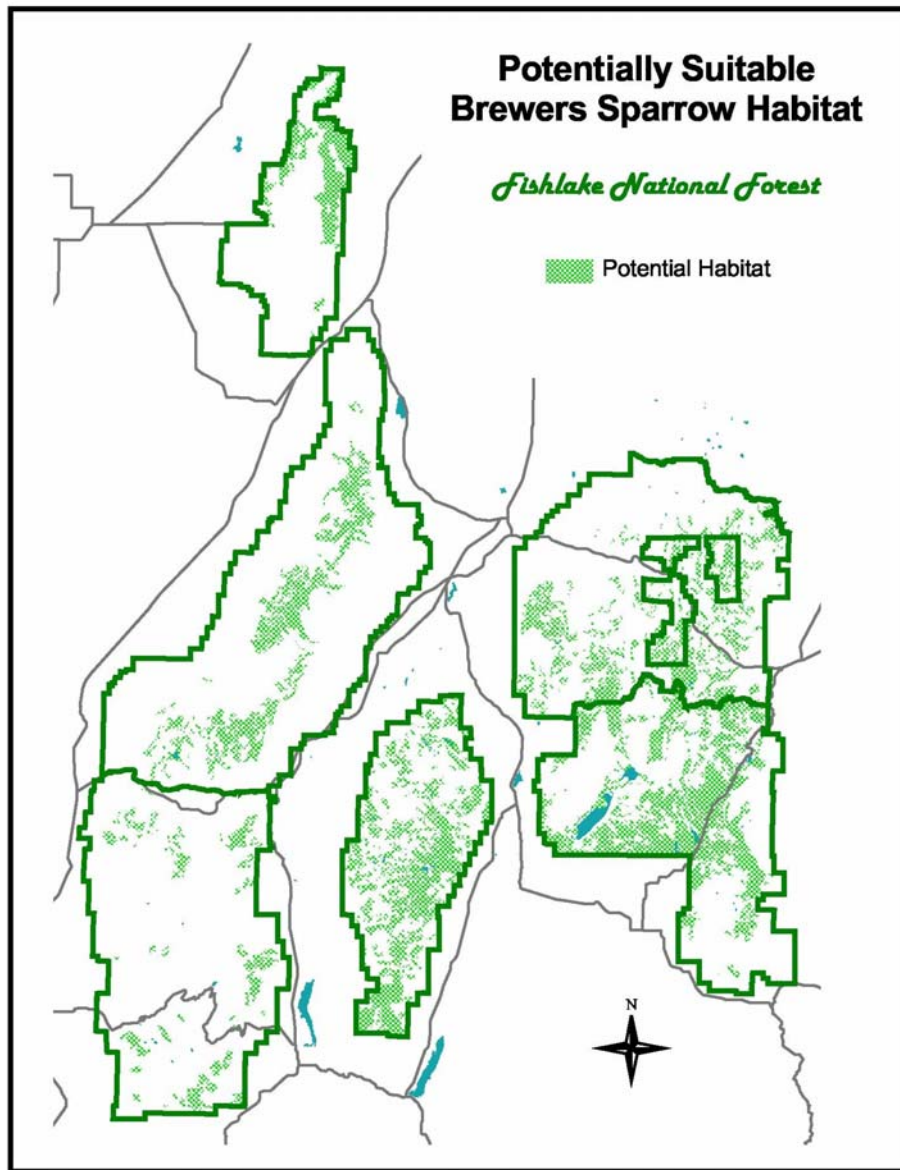
The Brewer's sparrow is a common summer resident and breeder in mountains and higher valley. It breeds in treeless shrub habitats with moderate canopy, especially in sagebrush. The Brewer's sparrow breeds locally above pinyon-juniper belt. It is common in winter in open desert scrub and cropland habitats of southern Mojave and Colorado deserts, usually in areas with some herbaceous understory.

This species is approximately 5-5 1/2" (13-15 cm). It is gray with black and chestnut edging on the feathers above, gray striping on the crown, and a white eye ring. The Brewer's sparrow song is a dry, buzzy trill on different notes, descending at the end. Brewer's sparrows breed across portions of western Canada and southwestern North Dakota, south to southern California, southern Nevada, central Arizona, and northwestern New Mexico. They winter from portions of southwestern U.S., south to southern Baja California and central mainland of Mexico.

In summer, they often find cover in sagebrush in extensive stands with moderate copy unbroken by trees, usually 0.5-1.3 m (1.5-4.0 ft) in height. Similar shrub habitats, such as bitterbrush, are used to a lesser extent. In the nonbreeding season, a variety of brushlands of similar structure (Grinnell and Miller 1944) are used, along with plains, and fields (Garrett and Dunn 1981). In Wyoming, sagebrush, density was 30-40 pairs per 40 ha (100 ac). In Montana, Best (1972) found 45-50 pairs per 40 ha (100 ac) in unsprayed sagebrush, and 15-33 pairs per 40 ha (100 ac) in the first year after herbicide spraying that killed all sagebrush. Gashwiler (1977) reported 27-36 pairs per 40 ha (100 ac) in Oregon sagebrush. In successional brushfields in Sierra Co., Bock and Lynch (1970) reported 3.6 pairs per 40 ha (100 ac). In the same area, Savidge (1978) found 45 pairs per 40 ha (100 ac) in unsprayed brush, and 22.3 pairs per 40 ha (100 ac) in a matched plot sprayed heavily with herbicide.

In Idaho, this species builds cup-shaped nests in sagebrush between 20 and 50 cm high or in a low tree. This species forages on the ground. It may be abundant in sagebrush habitat (Great Basin and Pacific slopes). In eastern Washington, as many as 47 pairs of these sparrows have been recorded on 100 acres. A breeding density of 0.08-0.10 individuals/ha has been reported in shadscale habitat in eastern Nevada. Breeding territory averaged 0.52 ha in an Idaho study. During the nesting season many males may sing in chorus at dawn and twilight. Two Idaho studies have indicated nesting success is quite low. In the Great Basin, population density is usually 150-300/km², but may exceed 500/km² in some cases. This species is one of 7 neotropical migrants thought to be declining in Idaho.

Potentially suitable Brewer's sparrow habitat has been mapped across the entire Fishlake National Forest and is displayed below. This habitat consists of approximately 213,491 acres of potentially suitable habitat.

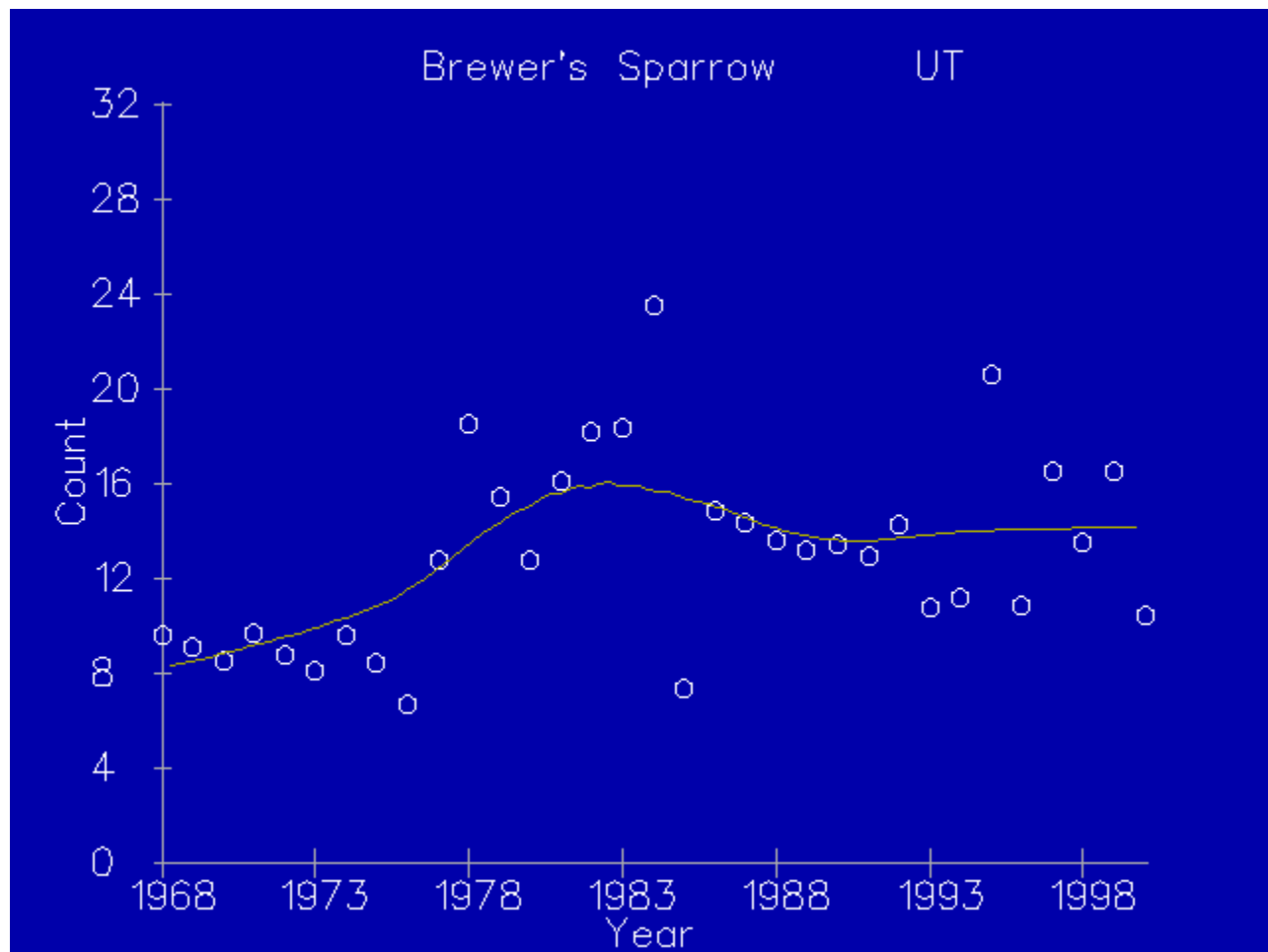


Breeding occurs in extensive shrub stands with moderate canopy cover, especially sagebrush. Winter habitat consists of open desert shrub and similar habitats, plains, and fields. Breeding occurs primarily from May through August. The nest is a cup of dry grass stems, forbs, and rootlets lined with fine grasses, rootlets, and hairs (Harrison 1978). The nest is usually located in the center of a sagebrush plant or other shrub up to 1.2 m (3.9 ft) above ground, but usually less than 0.3 m (1 ft). The Brewer's sparrow rarely nests on the ground. It breeds primarily from May through August with a peak in June. There are usually 3 or 4 eggs per clutch, occasionally 5. Incubation is between 11-13 days; altricial young fledge in 8-9 days (Harrison 1978, Ehrlich et al. 1988).

The diet of this sparrow primarily consists of insects and spiders in the summer and seeds of grasses and forbs in winter. This species will pick seeds from the ground, as well as glens, and glen seeds picked from the ground. It will occasionally pursue insects on the ground; and occasionally feeds in low shrubs (Bent 1968). This species will commonly drink and bathe, but may not require free water. They are able to meet water needs by eating insects (Ohmart and Smith 1970), and can subsist on dry seeds for up to 3 weeks (Ehrlich et al. 1988).

Trend

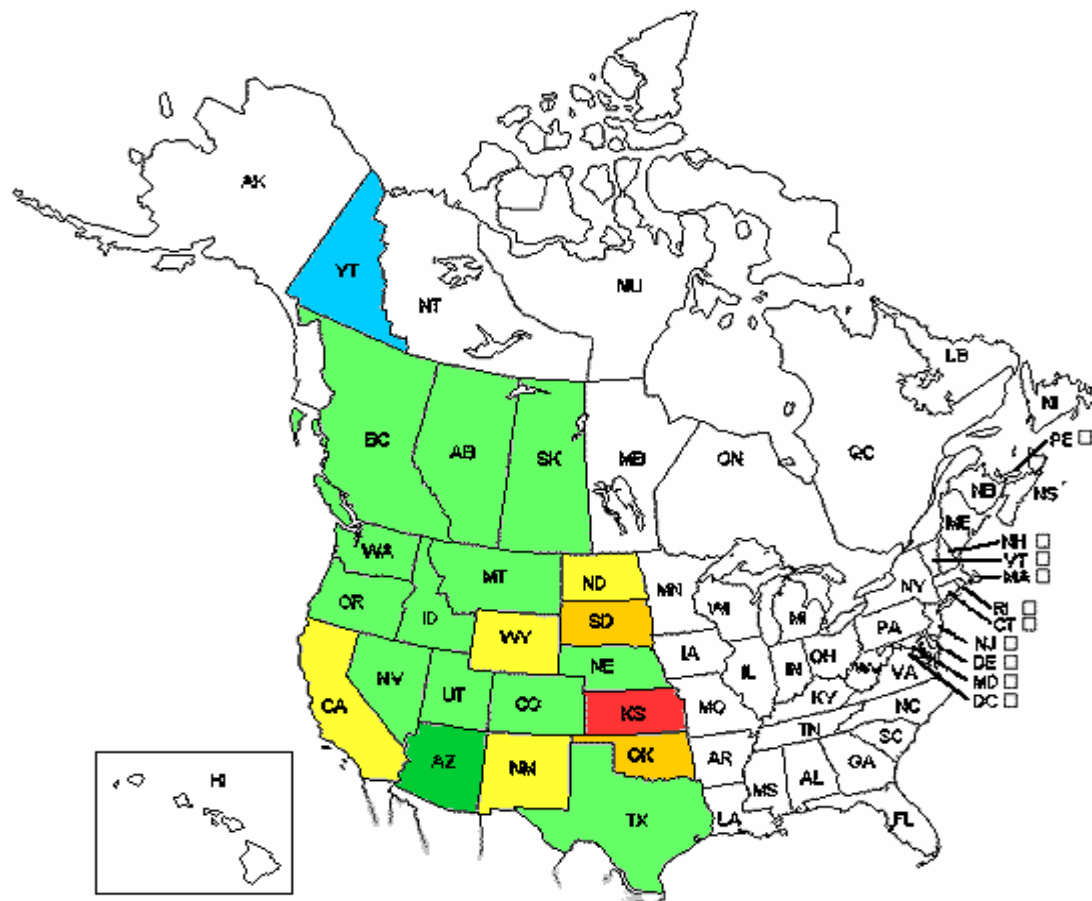
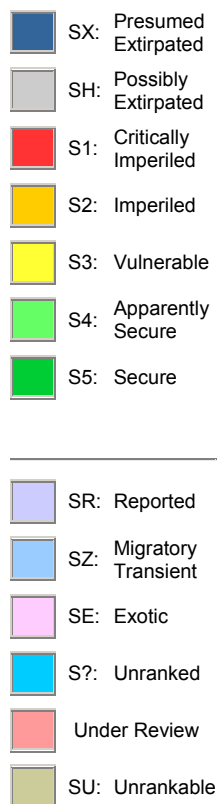
In addition to these data, the BBS database (www.mbr-pwrc.usgs.gov) display an upward trend of Brewer's sparrows in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.



The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The Brewer's sparrow has been ranked as "apparently secure".

Brewer's Sparrow (*Spizella breweri*)

State/Province Conservation Status Rank



Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by "expert birders" were conducted in 1994, 1998, and 2002. These surveys have targeted cavity nesting, riparian, and sage nesting species. All other avian species were also recorded while conducting these surveys.

Data has been collected on three different occasions between 1994-2002. In 1994 the number of presence/absence observations of this species along each transect line totaled 4 observations. It is important to note that this does not mean 4 birds were observed, rather, along 4 transects brewers sparrows were observed. This data was collected in the Burnt Flat area only. In 1998 forest wide surveys detected brewers sparrows along 6 transect lines. In 2002 the total number of transects with the brewers sparrow totaled 14. As a result of these data collected over the past 8 years, this species has increased in overall presence along transects across the forest. While these numbers are increasing they are few. Therefore, further data is needed to evaluate the status of the population on the Fishlake National Forest. However, based on the data from the BBS and the Nature Conservancy which display an upward and a "apparently secure" rating, as well as my professional judgment, the trend of this species across the Fishlake National Forest is stable to slightly up, and is viable.

Vesper Sparrow (*Pooecetes gramineus*)

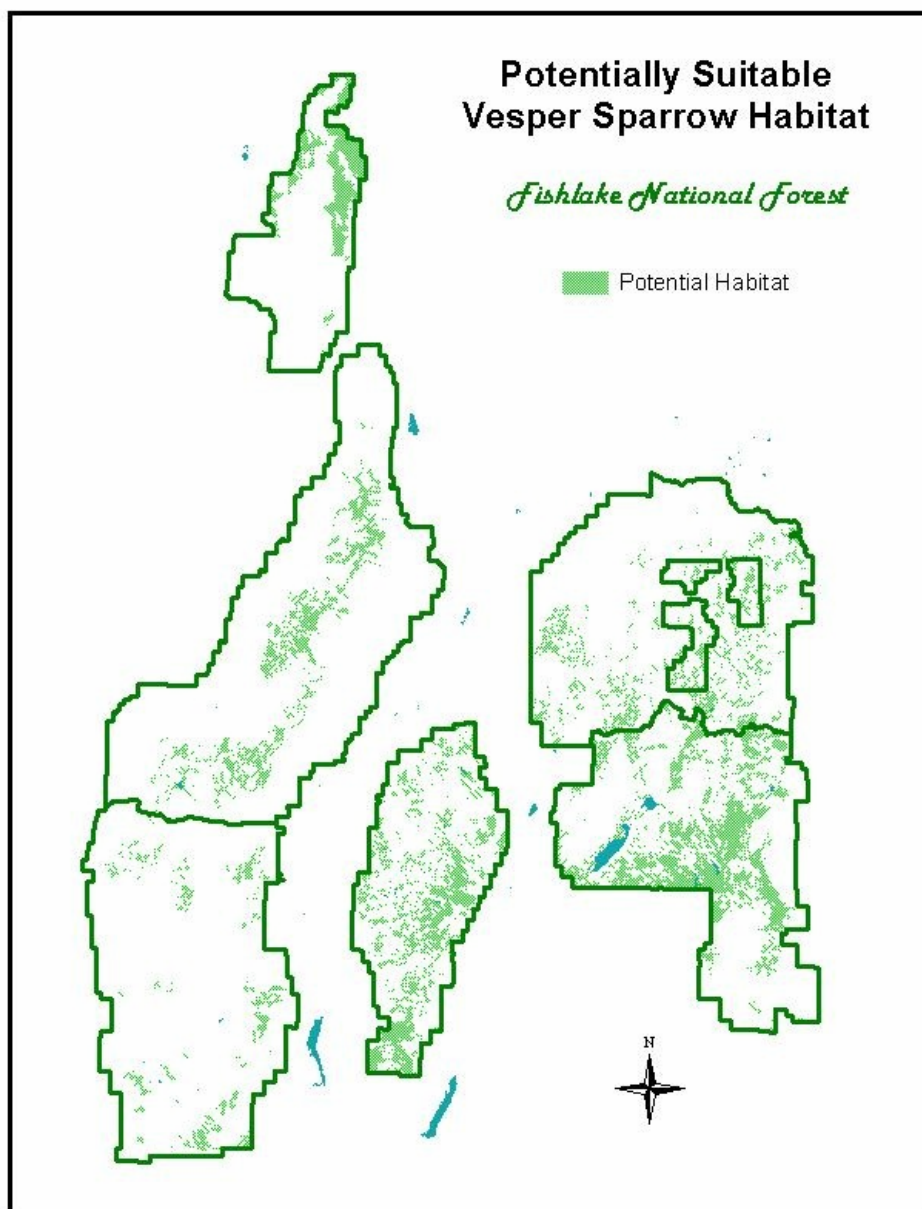
The Vesper sparrow is found in shrub steppe, grasslands, savannas, weedy pastures, fields, sagebrush, arid scrub, and woodland clearings. An Idaho study found this species was more abundant in prescribed burn areas of juniper than in old growth or clearcut. The Vesper sparrow is a common summer resident occurring in sparse or open stands of sagebrush, low sagebrush, and similar habitats. In winter months, it occupies grasslands, croplands, and open brushlands. It mostly arrives on breeding grounds in April and departs by October. This species breeds across portions of Canada, south to eastern and southern California, central Nevada, southwestern Utah, Arizona, central New Mexico, Colorado, Kansas, Minnesota, Tennessee, and North Carolina. It winters in central California, southwestern U.S., and portions of eastern U.S., south to southern Mexico, Gulf Coast and central Florida. Wintering individuals often arrive in September and depart in March or April.

This species is approximately 5-6 1/2" (13-17 cm) in size. It has a rough, unkempt appearance due to the dark feathers that protrude from a light breast; also black and brown feathers that do not lay flat on back and wings. It has a streaked head with a white eye ring, "rufous shoulder patches and white outer tail feathers." Its song begins with 2-3 throating whistles followed by trilled notes and a rapid melody.

Breeding density per 40 ha (100 ac) was reported as: 17.5 to 33 pairs in sagebrush-grassland in Montana (Best 1972), and 5 pairs in the Missouri River Breaks (Walcheck 1970); 9-50 pairs in Michigan (Bent 1968). Breeding season is late April into mid-August, with a peak in May and June. The Vesper sparrow is apparently a solitary breeder. Clutch size is 3-6 eggs, usually 4 or 5. It sometimes raises 2 broods per yr. Incubation lasts 11-13 days. Altricial young are tended by both parents, and leave the nest at 9-13 days, still unable to fly. Young are dependent on parents an additional 20-22 days (Harrison 1978). This species builds a nest on the ground, often in a small depression, concealed under a shrub or at base of grasses or forbs. The Vesper sparrow breeds in sagebrush and other shrub habitats with sparse vegetation.

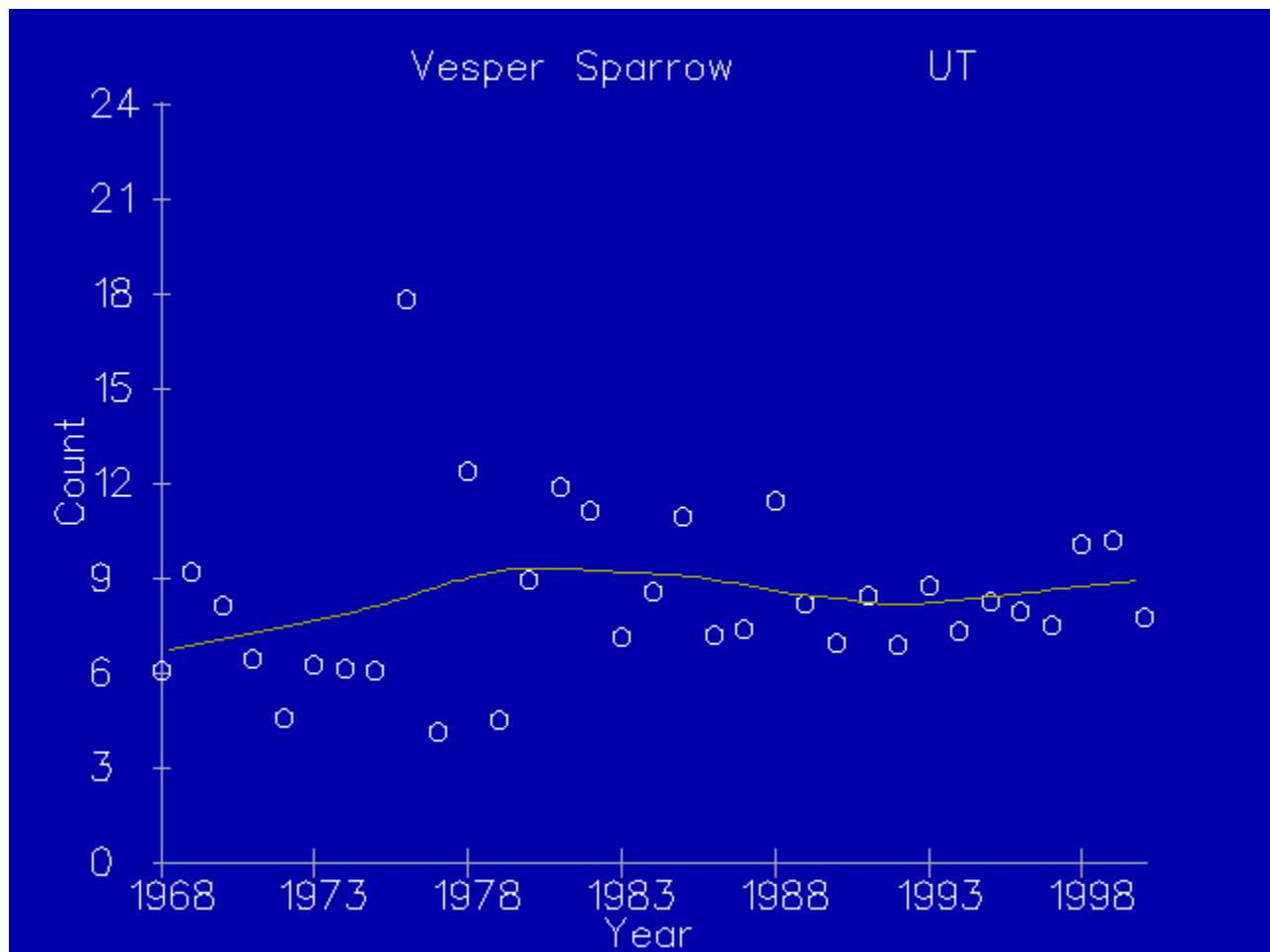
Annual diet is about half insects and spiders, and half grass and forb seeds (Bent 1968, Ehrlich et al. 1988). Insects and spiders are especially important in breeding season. It gleans from the ground and herbage. The Vesper sparrow can live on air-dried seeds without drinking (Bartholomew 1972). Ohmart and Smith (1971) observed drinking, but also recorded individuals 16-24 km (10-15 mi) away from known surface water. Captives drank 19.7% of body weight per day, but could survive on dry seeds without water.

On the Fishlake National Forest suitable habitat occurs for the Vesper sparrow across all 4 Ranger Districts. The map below displays approximately 213,491 acres of potentially suitable habitat across the forest.



Trend

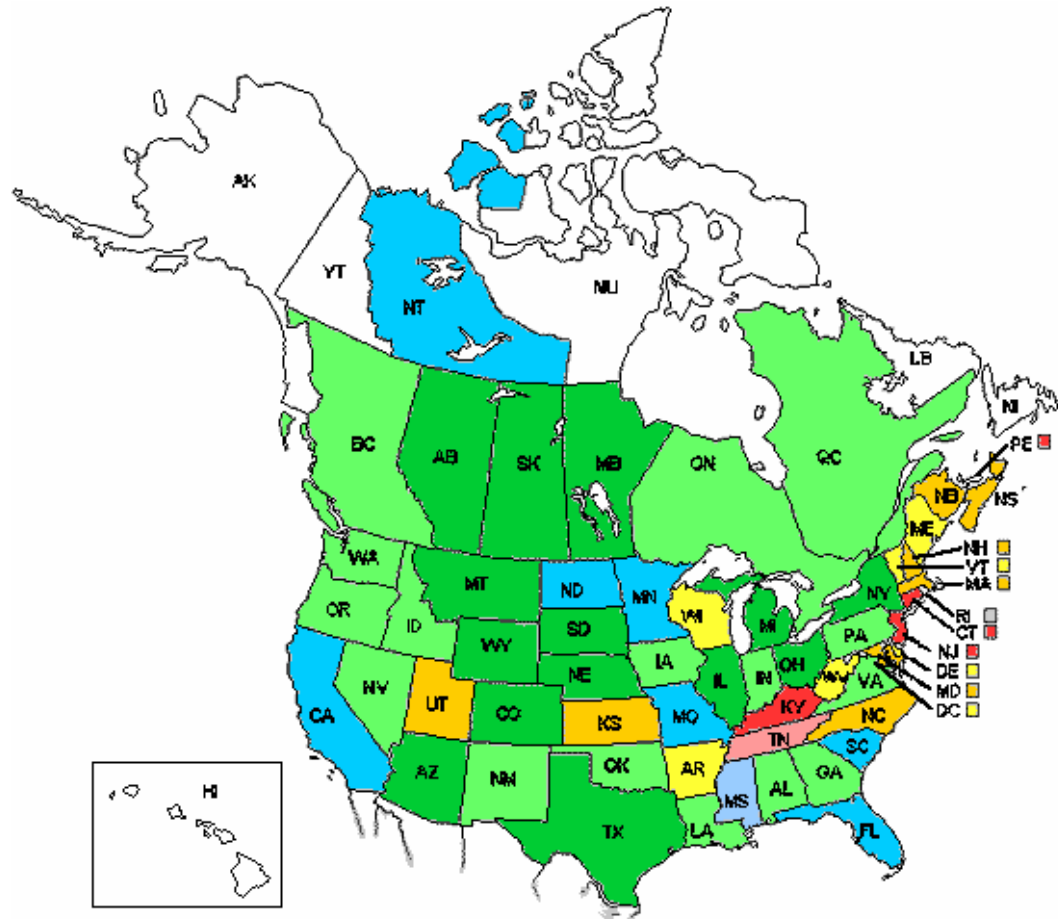
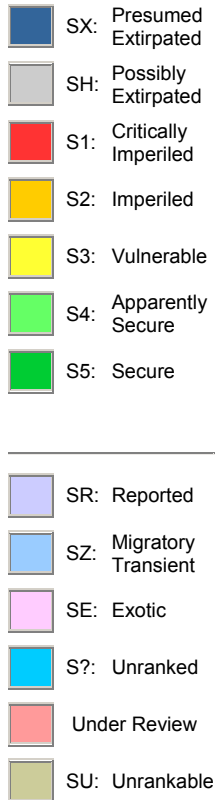
In addition to these data, the BBS database (www.mbr-pwrc.usgs.gov) display a slight upward trend of Vesper sparrows in Utah. These data represent a 30-year trend between 1968 and 1998. These data were collected throughout the entire state of Utah, including points on the Fishlake National Forest.



The map below displays the status ranking from the Nature Conservancy database (NatureServe Explorer). The Vesper sparrow in Utah has been ranked as “imperiled”.

Vesper Sparrow (*Pooecetes gramineus*)

State/Province Conservation Status Rank



Surveys for avian MIS have been conducted on the Fishlake National Forest since the mid 1980's. Additional studies by “expert birders” were conducted in 1994, 1998, and 2002. These surveys have targeted cavity nesting, riparian, and sage nesting species. All other avian species were also recorded while conducting these surveys.

Data has been collected on three different occasions between 1994-2002. In 1994 this species was not detected along transect lines in the Burnt Flat area. In 1998 the number of presence/absence observations of this species along each transect line totaled 6. In 2002 the total number of observations along transect lines forest wide totaled 9. As a result of these data collected over the past 8 years, this species has increased in occurrence across the forest. While these numbers are increasing, the data collected across the forest is minimal. The BBS data demonstrates a slight increase in the total numbers in Utah, which includes transects on the Fishlake National Forest, while the Nature Conservancy data describe this species as “imperiled”. Considering all the data presented in this document, and my professional judgment, this population is stable or slightly up in trend, and likely viable across the forest. However, due to limited information, additional data gathering is an ongoing process on the forest.